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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,338	10/22/2003	Takahiro Naka	448563/0233	6856

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Lawrence Rosenthal  
Stroock & Stroock & Lavan LLP  
180 Maiden Lane  
New York, NY 10038

EXAMINER

MAFAHER, NINA YASMIN

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/691,338

Applicant(s)

NAKA ET AL.

Examiner

Nina Y. Mafaher

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date 10/22/2003.
- 4) ☐ Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 4, 10, 11, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Kosugi (6,585,345).

With respect to Claim 1, Kosugi teaches the claimed liquid cartridge having a liquid supply port (Column 1, lines 44-45; Figure 5, 314), a memory storing therein data on liquid housed in the container (Column 1, lines 30-33; Column 2, lines 5-10), a communication unit provided on a wall opposed to wall in which said liquid supply port is formed (Figure 5, storage unit, 314) including an antenna portion in which a rectangular conductive pattern is formed (Column 8, lines 21-29; Figure 6A, 36).

With respect to Claim 3, Kosugi teaches an antenna formed with a conductive pattern on a base body (Figure 6A, 36, 41).

With respect to Claim 4, Kosugi teaches an antenna formed with a conductive pattern and memory mounted on a base body (Figure 6A, 36, 41).

With respect to Claim 10, Kosugi teaches a protective cover material on surface of antenna portion (Column 10, lines 16-19).

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With respect to Claim 11, Kosugi teaches an antenna formed of a conductive layer formed on a rectangular base body, having a rectangular and spiral pattern (Figure 6A).

With respect to Claim 12, Kosugi teaches a lever supporting an attachment operation (Column 9, lines 52-57; Figure 5, 92).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosugi (6,585,345) in view of Usui (6,793,330).

With respect to Claim 2, Kosugi teaches the invention as set forth above. Kosugi does not disclose a lid member or the portion of the wall surface region the antenna occupies. Usui discloses a lid member (Column 1, lines 19-20). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the liquid container of Kosugi to have a lid member so as to seal an opening portion of the container body, therefore having no ink leak out. Although Kosugi does not disclose the portion of the wall region the antenna occupies, he does show that the antenna portion does cover a large portion of the surface (Figure 4a, storage unit). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made

to modify the antenna of Kosugi to occupy at least 70% of one wall surface region of the container body, as the antenna's main function of communication with the recording apparatus is necessary and would still be maintained.

With respect to Claim 7, Kosugi teaches the invention as set forth above, but is silent to the width of the cartridge according to the kind of liquid within. Usui teaches a container formed to so that a width thereof is different according to the kind of liquid (Column 9, lines 36-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the width of the ink cartridge of Kosugi with that of Usui as ink of different colors are consumed differently. The volume of the ink containers are not equal, the width of each container is designed to be different from one another to fix the ink consumption rate.

5. Claim 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosugi (6,585,345) in view of Usui (6,799,820).

With respect to Claims 5 and 6, Kosugi teaches the invention as set forth above but lacks the detection unit mounted on a base body. Usui teaches a liquid container with a detection unit mounted onto a base body mounted to the container (Column 67, lines 37-40; Column 68, lines 27-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the liquid container and base body of Kosugi with that of Usui to include a detection unit mounted on a base body for the purpose of detecting the amount of liquid (Column 67, lines 37-40).

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6. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosugi (6,585,345) in view of Matsuzaki (6,416,152).

With respect to Claims 8 and 9, Kosugi teaches the invention set forth above but is silent to a recess where the antenna portion is arranged and its depth. Matsuzaki teaches a recessed portion in which a memory device is housed (Column 3, lines 50-51; Figure 3a, 30, 29) with a protective cover material in such a manner that a gap is defined between the memory device and the protective cover (Column 3, lines 50-55; Figures 3a and 3b, 27, 29, 30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the antenna portion of Kosugi with a recessed housing as taught by Matsuzaki to avoid damage to the antenna portion.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nina Y. Mafaher whose telephone number is (571)272-1812. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Meier can be reached on (571)272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NYM



EDWARD LEFKOWITZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800